

JULY 1976

No  
96



How to locate products of specific interest.  
Each item in the Source Guide is numbered  
to correspond with its product category  
listed below. Listings are grouped by cate-  
gory number and the groups are placed in  
numerical order. To find specific items by  
category, simply scan the listings until you  
reach items with the desired category  
number.

advertisers'  
bimonthly  
optical, electro-optical  
opto-electronic, laser  
and photographic

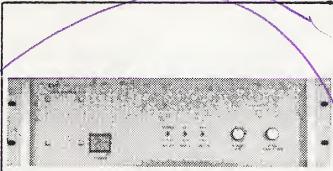
# source guide

to new and significant  
instrumentation, equipment  
components, materials  
and services

SCANNERS, MODULATORS, ETC.	1
OPTICAL DEVICES	2
LENSES/LENS ASSEMBLIES	3
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IMAGE SENSORS/CAMERAS	6
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SPIE SOURCE GUIDE is published every other month by the Society of Photo-Optical Instrumentation Engineers  
P. O. Box 1146 Palos Verdes Estates, California 90274 USA Telephone 213/378-1216



### 1 CVI Model 270 Video Digitizer

270 Video Digitizer converts std. comp. video signals to digital data for computer processing & control; exactly locates picture elements; monitors encoding process for easy setup; has Z modulation output capability.

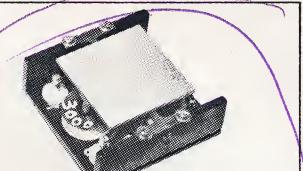
**Colorado Video, Inc.**  
Box 928, Boulder, Colo. 80302  
303/444-3972



### 1 M-40R Acousto-Optic Light Modulator

100% modulation at dc. 85% optical efficiency (typical). Broad wavelength—4,000 to 12,000 Å. Extended ranges available. Low power requirements. Use as light deflector. Solid state, compact, lightweight, low cost.

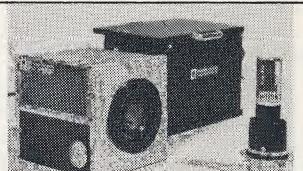
**FJW Industries**  
215 E. Prospect Ave.  
Mt. Prospect, Ill. 60056



### 1 Large Mirror Scanner Operates Down to 5Hz

Scanning applications requiring low frequency and/or large mirrors can be satisfied with taut band devices which cover ranges from 5—400 Hz, scan angles to 30° pp. For details on scanners & beam choppers to 16KHz:

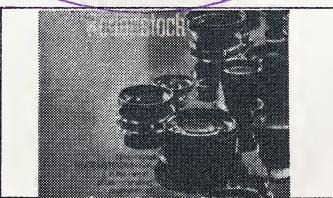
**Electron. Div., Bulova Watch Co.**  
61-20 Woodside Avenue  
Woodside, New York 11377



### 2 Plug-In -50°C PMT/ Vidicon

Carnot Cycle refrigerated chambers complete with Electrostatic/Magnetic shielding are less than \$1,000. PMT Cooler (TE-149) accepts 2" or smaller end-window tubes. Vidicon version (TE-150) for 1" or smaller tubes.

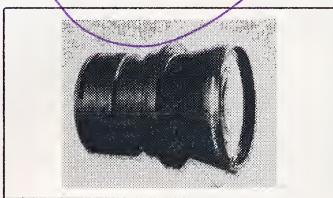
**Products for Research, Inc.**  
78 Holten Street, Danvers, MA 01923 (617) 774-3250



### 3 New Comprehensive Rodenstock Catalog

Now available listing shelf products consisting of mounted lenses for all applications, loose optics, mirrors and prisms. Custom designed systems for medium to large production runs are a specialty.

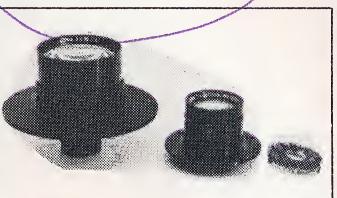
**Rodenstock Precision Optics**  
5300 Golf Road  
Skokie IL 60076 312/965-5354



### 3 High Performance CRT Lens Systems

Custom design and fabrication of high performance refractive lens systems, f/0.84 thru f/1.15. Spectral range .4 to .7 micron, color correction C-e Format, 3.150" square to 3.930" square. Image, 12" square to 72" square

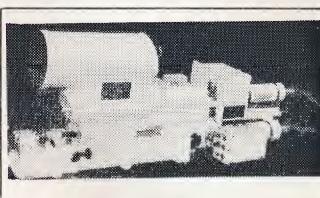
**Diffraction Optics**  
4035 Transport St.  
Palo Alto, California 94303



### 3 Kowa Optical Systems And Components

Lenses: high speed, photo copy, finite conjugate, projection, phototypesetting, CCTV, CRT, cine — off-the-shelf or custom designed per your specs and schedule. Kowa is the leader in Japanese optics.

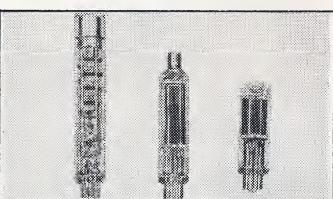
**Kowa Optical Div./D.O. Indust.**  
480 Clinton Avenue South  
Rochester, New York 14620



### 3 ZOOMAR Universal Tracking Combination

Dual range electromechanical switching device 10:1 zoom range: 3.5"—35", f/5.6, 10.5"—105", f/17. Versatile — can be fitted for use as zoom telescope, fitted to motion picture cameras, adapted to L.L.L. applications.

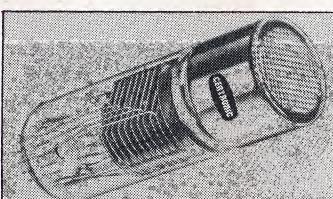
**ZOOMAR, Inc.**  
Glen Cove, N.Y. 11542  
(516) 676-1904



### 5 1/2" Diameter Photomultiplier Tube

HTV manufactures more than 15 types of end and side 1/2" window PMT's. Cathode includes CsSb, CsTe, and multialkali windows and fused silica, UV glass or borosilicate.

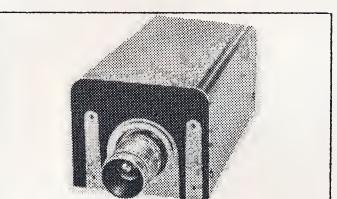
**Hamamatsu Corporation**  
120 Wood Avenue  
Middlesex, New Jersey 08846



### 5 High Performance Photomultiplier Tube

Photomultiplier tubes with low dark current and high Q. E. Send for catalog describing broad range of S-11, Bialkali, Trialkali (S-20, S-25) tubes or call us at (201) 845-7252 for applications help.

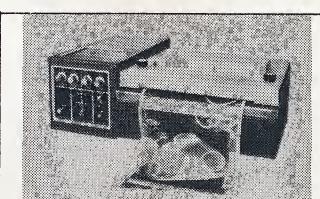
**Bailey Instruments Inc.**  
515 Victor Street  
Saddle Brook, N.J. 07662



### 6 Hi-Performance TV Cameras & Equipment

Hi-resolution 1&2-piece cameras slow scan & x-ray-sensitive units, ultra-hi-resolution Vidicons, SIT cameras & image-intensified combos for LLL work. 1 & 2 piece Minicons plus advanced rect-cornered Monitors.

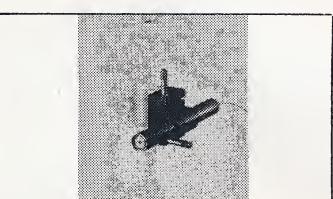
**Sierra Scientific Corp.**  
2189 Leghorn Street  
Mountain View, CA 94043



### 7 Instant Hard Copy Graphic Recorders

Record from scanning radio, optical, IR and sound sources or graphic soft displays and TV at the push of a button. Simple to interface. Uses Alfax Paper for 8-16 tone shades at a cost of 1¢/frame.

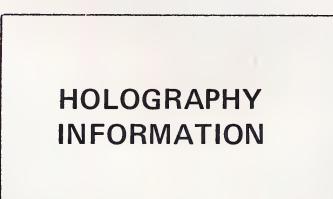
**Alden Electronics Co., Inc.**  
Alden Research Center  
Westboro, Mass. 01581



### 8 Accessories for the Laser/Optics Lab

Complete He-Ne laser from \$265. Laser mounts from \$50. NRC offers over 500 items for the laser/optics lab, incl vibration-isolated optical tables, mirror mounts, positioners, & optics. Send for free 1976 catalog.

**Newport Research Corporation**  
18235 Mt. Baldy Cir., Fountain Valley, CA 92708 714/962-7701



### HOLOGRAPHY INFORMATION

#### 8 Holography Information Available

A market survey of holography through 1980 has been published as well as a compilation of important holographic patents held by Holotron. Both are free by contacting the Holotron Corporation.

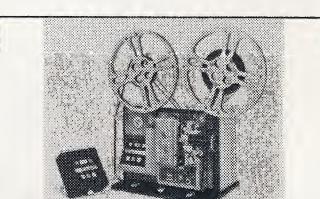
**Holotron Corporation**  
1375 Perry Street  
Columbus, Ohio 43201



#### 10 Polaroid's Technical Assistance "Hot Line"

Instant answers to questions about instant photography and its applications. Information about Polaroid camera systems and instant films for science, business and industry. Call collect 617/547-5176.

**Polaroid Corporation**  
Cambridge  
Mass. 02139



### 10 Television Film Chain Projectors

L-W offers complete film analyzing systems: 16mm data recording cameras; flickerless analytical projectors, silent & sound; film viewers/digitizers capable of interface to computer; & television film chain projectors.

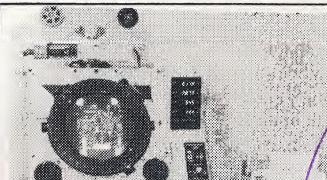
**L-W International**  
6416 Variel Ave., Woodland Hills CA 91364 213/348-8614



### **10 L<sup>3</sup>TV Fixed Focal Length Lenses**

Motorized iris, self contained auto-iris controller, internal filters for SIT, ISIT, High speed, 6.5/12.5, 25, 50, 75, 100, 150, 230&300mm. Also 10X&6Xf1.8. High performance zooms. Nite\*Tel Cat systems to 700mmf2.0 & beyond.

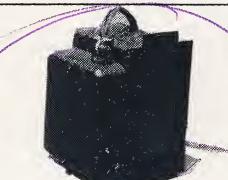
**Lenzar Optics Corp.**  
210 Brant Rd. Lake Park,  
Florida 33403-305/844-0263



### **10 Motion Analyzer Teletype Output**

Motion analyzer w/self contained microprocessor controlled interface provides output to ASR 33 & Tek 31 programmable calculator. 16 preselectable output formats. Can upgrade existing motion analyzers.

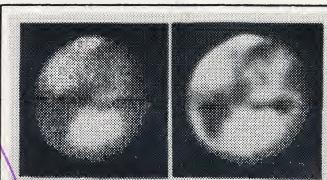
**Vanguard Instrument Corp.**  
1860 Walt Whitman Rd., Melville, N.Y. 11746. 516/249-3031



### **10 70 MM Auto Advance Roll Film Magazine**

Attaches to any 4x5 Graflex back. Lightweight, allows simple coupling to oscilloscope cameras optical test devices and portrait cameras. Features include accurate motorized framing advance, film cutter and I.D. slate.

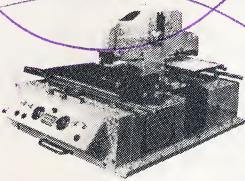
**Flight Research**  
Box 1-F, Richmond  
Virginia 23201 804/222-0163



### **10 Linear Radial Transmission Filter**

Film graininess can be removed and detail greatly enhanced with the LRTF. Above left is a conventional print; at right one with LRTF enhancing. The LRTF is used with a conventional enlarger, just below the lens.

**LRTF Photographic Enhancement** 13 Burke Avenue  
Newport News, VA 23601



### **11 Computer Controlled Microdensitometer**

Joyce-Loebl Microdensitometer 3CS now with Computer Control and new Joyce-Loebl Wizard Software Package takes the work out of image analysis. Scan film or plates with density to 6D in X-Y with 1 micron resolution.

**Marco Scientific, Inc.**  
Box 2699  
Santa Clara, CA 95051

### Technical Publication

### **16 Medical IV - Applied Instrumentation - Vol. 70**

Price: \$36 U.S., Canada \$38 Overseas. Potential improvement of diagnostic medical procedures, as well as other current topics, were chosen for in-depth exploration by physicians, engineers, and manufacturers. 50 papers, 432 pages.

**SPIE**  
P.O. Box 1146  
Palos Verdes Estates, CA 90274

## Optical Engineering SPIE SOURCE GUIDE DATA REQUEST

Gentlemen: I am interested in knowing more about your product(s) advertised in the \_\_\_\_\_ issue of the SPIE SOURCE GUIDE under Category \_\_\_\_\_

Product Name: \_\_\_\_\_

Please contact me to discuss.

Name \_\_\_\_\_

Please rush information and data.

Company \_\_\_\_\_

Title: \_\_\_\_\_

Address \_\_\_\_\_

Phone: \_\_\_\_\_

City \_\_\_\_\_

State/Zip: \_\_\_\_\_

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City \_\_\_\_\_

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### FOR FAST RESPONSE USE THIS REPLY FORM

Cut out and  
mail directly  
to the vendor  
at the address  
in the listing